

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A ceramic member having a purity of 95 wt% or higher and having a surface comprising crystal grains, wherein a crystal grain on the surface of the ceramic member comprises a plurality of protrusions having a smaller diameter than that of the crystal grain.
2. (Withdrawn) A method of producing a ceramic member, comprising treating wherein a dense ceramic base material, having a purity of 95 wt% or higher, having a surface comprising crystal grains and having a density exceeding 90% of a theoretical density, is performed on the surface thereof with by subjecting a surface of the dense ceramic base material to a corrosion treatment in an acid etchant, wherein a crystal grain on the surface of the ceramic member comprising a plurality of protrusions having a smaller diameter than that of the crystal grain that is formed whereby ceramic grains existing on the surface or its vicinity of the base material are formed on the surface thereof with a plurality of protrusions.
3. (Withdrawn) The method of producing the ceramic member as set forth in claim 2, wherein the step of treating in an acid etchant further comprises dense ceramic base material is performed with an acid etching treatment by heating the acid etchant at temperature of 100°C or higher.
4. (Withdrawn) The method of producing the ceramic member as set forth in claim 2, wherein the acid etchant is (i) a sulfuric acid or a water solution thereof, otherwise (ii) a phosphoric acid or a water solution thereof.
5. (Currently Amended) A surface rugged ceramic member, comprising a dense ceramic having a purity of 95 wt% or higher as a base material, wherein a surface layer of the base material comprises a rugged structure containing fine pores, wherein the fine pores have

a diameter of 0.5 to 50 times the average grain diameter of the ceramic, and wherein large diameter portions of at least some of the fine pores are oriented in a depth direction.

6. (Original) The surface rugged ceramic member as set forth in claim 5, wherein the dense base material has the purity of 99 wt% or higher.

7. (Previously Presented) The surface rugged ceramic member as set forth in claim 5, wherein the dense base material is 90 wt% or higher of a theoretical density.

8. (Previously Presented) The surface rugged ceramic member as set forth in claim 5, wherein the dense base material comprises one or more of alumina, yttrium aluminum garnet, aluminum nitride, yttria, zirconia, or calcium phosphate based ceramics.

9. (Withdrawn) A method of producing a surface rugged ceramic member, comprising treating wherein a dense ceramic base material having a purity being 95 wt% or higher and having a density of more than 90% of a theoretical density, by subjecting the dense ceramic base material ~~is subjected~~ to a corrosion treatment which comprises subjecting a on ~~the surface of the dense ceramic base material to thereof~~ in an acid etchant, so that the surface layer comprises a is rugged surface containing fine pores, wherein the fine pores have a ~~having pore~~ diameter of 0.5 to 50 times the of average grain diameter ~~diameters~~ of the ceramic ceramics ~~and wherein containing fine pores with~~ large diameter portions of at least some of the fine pores are oriented in a depth direction.

10. (Withdrawn) The method of producing the surface rugged ceramic member as set forth in claim 9, wherein the step of treating with an acid etchant further comprises heating the acid etchant ~~is heated in use~~.

11. (Withdrawn) The method of producing the surface rugged ceramic member as set forth in claim 9, wherein the acid etchant is pressurized with 0.2 MPa or higher.

12. (Withdrawn) The method of producing the surface rugged ceramic member as set forth in claim 9, wherein the acid etchant is a water solution containing sulfuric acid or phosphoric acid.

13. (Withdrawn) The method of producing the surface rugged ceramic member as set forth in claim 9, wherein ~~the ceramic base material is carried out on the surface of the ceramic base material is subjected to thereof~~ with a heat treatment at temperatures of 2/3 or higher of a melting point of the ceramic eeramies after the corrosion treatment with the acid etchant.

14. (Previously Presented) A surface rugged ceramic member, comprising a dense ceramic base material having a purity of 95 wt% or higher, and average grain diameters of 10 to 70 μm , wherein a surface layer of the base material, within a depth from the surface of up to 5 times the average grain diameter, contains no pulverized layers, and wherein the surface layer comprises pores of a size on the order of the average grain size and oriented so that the pore is extended in the depth direction.

15. (Original) The surface rugged ceramic member as set forth in claim 14, wherein the dense ceramic base material has the purity of 99 wt% or higher.

16. (Previously Presented) The surface rugged ceramic member as set forth in claim 14, wherein the dense ceramic base material comprises one or more of alumina, yttrium aluminum garnet, aluminum nitride, yttria, or zirconia.

17. (Withdrawn) A method of producing a surface rugged ceramic member, comprising subjecting a surface of wherein a dense ceramic base material having a of purity of being 95 wt% or higher and having an average grain diameters being 10 to 70 μm is subjected to a corrosion treatment on the surface thereof in an acid etchant, and while removing a pulverized layer from a ceramic processed surface within a depth from the surface of up to 5 times the average grain diameter to produce a ceramic member wherein the surface layer comprises pores of a size on the order of the average grain size and oriented so that the

~~pore is extended in the depth direction, said ceramics has a rugged structure which seems as grains partially fall.~~

18. (Withdrawn) The method of producing the surface rugged ceramic member as set forth in claim 17, wherein the acid etchant is a water solution containing sulfuric acid or phosphoric acid.

19. (Cancelled)

20. (Withdrawn) The method of producing the ceramic member as set forth in claim 3, wherein the acid etchant is (i) a sulfuric acid or a water solution thereof, otherwise (ii) a phosphoric acid or a water solution thereof.

21. (Previously Presented) The surface rugged ceramic member as set forth in claim 6, wherein the dense base material is 90 wt% or higher of a theoretical density.

22. (Previously Presented) The surface rugged ceramic member as set forth in claim 6, wherein the dense base material comprises one or more of alumina, yttrium aluminum garnet, aluminum nitride, yttria, zirconia, or calcium phosphate based ceramics.

23. (Withdrawn) The method of producing the surface rugged ceramic member as set forth in claim 10, wherein the acid etchant is pressurized with 0.2 MPa or higher.

24. (Withdrawn) The method of producing the surface rugged ceramic member as set forth in claim 10, wherein the acid etchant is a water solution containing sulfuric acid or phosphoric acid.

25. (Withdrawn) The method of producing the surface rugged ceramic member as set forth in claim 10, wherein ~~the ceramic base material is carried out on the surface of the~~ ceramic base material is subjected to thereof with a heat treatment at temperatures of 2/3 or

higher of a melting point of the ceramic ~~ceramics~~ after the corrosion treatment with the acid etchant.

26. (Previously Presented) The surface rugged ceramic member as set forth in claim 15, wherein the dense ceramic base material comprises one or more of alumina, yttrium aluminum garnet, aluminum nitride, yttria, or zirconia.

27. (Previously Presented) A vapor deposition apparatus comprising a ceramic member according to claim 1.

28. (Previously Presented) A vapor deposition apparatus comprising a surface rugged ceramic member according to claim 5.

29. (Previously Presented) A vapor deposition apparatus comprising a surface rugged ceramic member according claim 14.

30. (Cancelled)